

IN THE CLAIMS

The following is a complete listing of the claims, and replaces all earlier versions and listings.

1. (Currently Amended) A method of extracting gold from arsenic gold ore concentrate ~~involves the following steps in turn comprising:~~

(1) ~~Load the~~ loading a material comprising arsenic gold ore concentrate and iron powder into ~~[[the]]~~ a smelting chamber; ~~[[.]]~~

(2) ~~Increase~~ increasing the temperature of the smelting chamber to 100°C-300°C and ~~then hold the~~ holding that temperature to remove ~~[[the]]~~ vapor and a small quantity of dust ~~[[in]]~~ from the material; ~~[[.]]~~

(3) ~~Under~~ increasing, under residual pressure ≤ 50 Pa, ~~increase~~ the temperature of the smelting chamber and the temperature of a crystallization chamber to 300-500°C and ~~then hold the~~ holding the increased temperatures to remove ~~[[the]]~~ volatilized arsenic sulfides ~~[[in]]~~ from the material; ~~[[.]]~~

(4) ~~Hold~~ holding the temperature of the crystallization chamber at 300-500°C, and ~~increase~~ increasing the temperature of the smelting chamber to 500-600°C and ~~then hold the~~ holding that temperature to remove ~~[[the]]~~ decomposed gaseous element sulfur ~~decomposed~~ from the material; ~~[[.]]~~

(5) ~~Increase~~ increasing the temperature of the smelting chamber to 600-760°C and ~~then hold the~~ holding that temperature, ~~meanwhile lower~~ while lowering the temperature of the crystallization chamber to 270-370°C and ~~then hold the~~ holding that temperature to ~~let the~~ allow arsenic vapor generated from the material to crystallize in the crystallization chamber

and ~~get element~~ obtain arsenic and ~~also get~~ gold-rich slag after dearsenization at the bottom of the smelting chamber; [[.]]

(6) ~~Lower~~ lowering the temperatures of the smelting chamber and the crystallization chamber to below 150°C, ~~charge the~~ charging air into an air charging valve, and, when [[the]] inside and outside air pressures are approximately ~~basically~~ equal, [[strip]] stripping the arsenic, and [[take]] taking out the gold-rich slag after dearsenization; and [[.]]

(7) ~~Extract~~ extracting fine gold from the gold-rich slag ~~got using conventional~~ method.

2. (Currently Amended) A method of extracting gold from arsenic gold ore concentrate as ~~mentioned~~ in Claim 1, ~~featuring that~~ further comprising the step of crushing, before the material is charged into the ~~above mentioned~~ smelting chamber, ~~there is a step to crush the~~ arsenic gold ore concentrate material into a grain size of 0.1mm-2mm.

3. (Currently Amended) A method of extracting gold from arsenic gold ore concentrate as ~~mentioned~~ in Claim 1, ~~featuring that~~ in which the weight of ~~above mentioned~~ iron powder is 2-4% of arsenic concentrate material.

4. (Currently Amended) A method of extracting gold from arsenic gold ore concentrate as ~~mentioned~~ in Claim 1, ~~featuring that~~ in which the temperature of the smelting chamber in step (2) is held for a holding time [[is]] of 1-2 hours ~~in the above step (2)~~.

5. (Currently Amended) A method of extracting gold from arsenic gold ore concentrate as

~~mentioned~~ in Claim 1, ~~featuring that~~ in which the temperature of the smelting chamber and the temperature of the crystallization chamber in step (3) are held for a holding time [[is]] of 1-2 hours in the above step (3).

6. (Currently Amended) A method of extracting gold from arsenic gold ore concentrate as ~~mentioned~~ in Claim 1, ~~featuring that~~ in which the temperature of the crystallization chamber and the temperature of the smelting chamber in step (4) are held for a holding time [[is]] of 1-3 hours in the above step (4).

7. (Currently Amended) A method of extracting gold from arsenic gold ore concentrate as ~~mentioned~~ in Claim 1, ~~featuring that~~ in which the temperature of the smelting chamber and the temperature of the crystallization chamber in step (5) are held for a holding time of smelting chamber and crystallization chamber is respectively 3-7 hours in the above step (5).

8. (Currently Amended) A method of extracting gold from arsenic gold ore concentrate as ~~mentioned~~ in Claim 1, ~~featuring that~~ in which the temperature of the smelting chamber in ~~the~~ above ~~mentioned~~ step (2) is 200-300°C.

9. (Currently Amended) A method of extracting gold from arsenic gold ore concentrate as ~~mentioned~~ in Claim 8, ~~featuring that~~ in which the temperature of the smelting chamber in ~~the~~ above ~~mentioned~~ step (2) is 250-300°C.

10. (Currently Amended) A method of extracting gold from arsenic gold ore concentrate as

mentioned in Claim 1, ~~featuring that~~ in which the temperature of the smelting chamber in ~~the~~
~~above mentioned~~ step (3) is 450-500°C.

11. (Currently Amended) A method of extracting gold from arsenic gold ore concentrate as
mentioned in Claim 1, ~~featuring that~~ in which the temperature of the crystallization chamber
in ~~the above mentioned~~ step (3) is 400-450°C.

12. (Currently Amended) A method of extracting gold from arsenic gold ore concentrate as
mentioned in Claim 1, ~~featuring that~~ in which the temperature of the smelting chamber in ~~the~~
~~above mentioned~~ step (4) is 550-600°C.

13. (Currently Amended) A method of extracting gold from arsenic gold ore concentrate as
~~mentioned~~ in Claim 1, ~~featuring that~~ in which the temperature of the crystallization chamber
in ~~the above mentioned~~ step (4) is 400-450°C.

14. (Currently Amended) A method of extracting gold from arsenic gold ore concentrate as
~~mentioned~~ in Claim 1, ~~featuring that~~ in which the temperature of the smelting chamber in ~~the~~
~~above mentioned~~ step (5) is 650-750°C.

15. (Currently Amended) A method of extracting gold from arsenic gold ore concentrate as
~~mentioned~~ in Claim 14, ~~featuring that~~ in which the temperature of the smelting chamber in
~~the above mentioned~~ step (5) is 700-750°C.

16. (Currently Amended) A method of extracting gold from arsenic gold ore concentrate as ~~mentioned~~ in Claim 1, ~~featuring that~~ in which the temperature of the crystallization chamber in ~~the above mentioned~~ step (5) is 300-360°C.

17. - 31. (Canceled)